REMARKS

Claims 1-22 stand rejected under 35 U.S.C. §102(e), as being anticipated by Scherpbier (U.S. Pat. No. 5,994,791). The examiner claims that each element of the independent claims and the dependent claims are anticipated by the Scherpbier reference. The applicants respectfully disagree with this characterization of the invention, and believe the claims to be allowable as filed. Nevertheless, in order to expedite the allowance of the present application, the applicants have amended the claims to more clearly distinguish the present invention over the prior art of record.

Specifically, claims 1, 9 and 16, have been amended to emphasize the direct nature of the communications between the listening program and the client. Scherpbier requires a control module (16) to execute on a server to establish and maintain communications between two clients. In contrast, the applicants described invention establishes a direct communication path between a browser and a client that does not require the intervention of a dedicated process such as the control module (16) (compare Scherpier's Figure 1 to applicants Figure 2).

Inclusion of the control module (16) and the placement thereof is a significant detriment that is addressed by the applicants' invention. For example, the invention of Scherpbier implies installation of the control module (16) on a server. Typically, computer users do not have the access rights and privileges necessary to install server software. In contrast, the ability to install remotely accessible software functions on a <u>client</u> machine is facilitated with the applicants invention. A client-based installation empowers users to install software functions that are of interest to the user, such as the storage management functions associated with the applicants' invention.

It is important to note that applicants' software architecture (i.e. structure) requires no special processes to be executed on the server. Therefore, the system administrators maintain control of
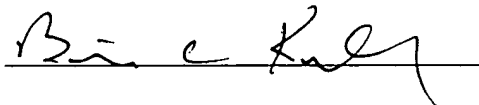
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server processes and access privileges within the existing network mechanisms. In contrast, the architecture of Scherpbier burdens the control module (16) with additional complexity in comparison with the listening program of the applicants invention. In Scherpbier's invention the control module (16) is a server-based process that must act as a client-based process in order to maintain network security. In other words, Scherpbier's control module 16 is potentially a security breach point placing undue burdens on the system administrators and the software developers of the control module (16).

Another disadvantage of the structure of Scherpbier over that of the applicants, is that the server becomes a bottleneck for communications between the browser and the client agent. Applicants assert that the number of clients that may be remotely accessed with Scherpbiers invention is severely limited. The control module 16 and therefore the server must receive and transmit all messages between the two clients. Applicant asserts that the server within Sherpbiers invention is required to perform functions that are normally conducted by specialized switches and routers within a network environment especially in light of multiple users and clients. In contrast, the applicants' invention requires no specialized server process and conducts communications directly between the browser and the client via well-suited network means. Moreover, as implied by applicant's Figure 2, the intent of the applicants invention is to use the server in roles established and maintained by the system administrators and not require the development of specialized server-based communication or control modules.

Applicant asserts that the amendments, particularly in light of the presented arguments, place independent claims 1, 9, 16, and dependent claims 2-8, 10-15, and 17-22 in condition for allowance.

Reconsideration of the rejections is requested. Allowance of Claims 1-22 at an early date is solicited.

Respectfully submitted,

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1.   (amended) A system for remotely accessing a client in a client- server system comprising :

a browser for requesting remote access;

a client machine further comprised of a listening program <u>configured to be</u> responsive to requests for remote access <u>from the browser, establish direct communications therewith, and invoke</u> [and] a client agent for communicating with the browser and a server machine.

9.   (amended) A method for remotely accessing a client machine from a browser over a network comprising the steps of:

providing a universal resource locator containing a machine name and a port number at a command line at the browser;

listening at the port number for access requests at the client machine;

responsive to a request for access from the browser, <u>establishing direct communications</u> <u>therewith;</u>

invoking a client agent within an application programming interface; and

communicating between the client agent and the browser over the network.

16.   (amended) A computer-readable medium having a program for servicing a request using a client, the client being capable of communicating with a browser, the client providing a plurality of functions, the program containing instructions for:

providing a client agent containing a client platform and an application programming interface; and

providing a listening program for listening for a communication from the browser, establishing direct communications therewith, and invoking the client agent;

wherein the client agent communicates with both the browser and a server.